

**Notice of Allowability**

Application No.

10/603,603

Examiner

Chat C. Do

Applicant(s)

NAKAYAMA, TADAYOSHI

Art Unit

2193

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/25/2007 and 03/26/2007.
2. ☒ The allowed claim(s) is/are 1-9, 11, and 13, as renumbered as 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### REASONS FOR ALLOWANCE

1. Claims 1-9, 11, and 13 are allowed.
2. Claims 10 and 12 are cancelled.
3. The following is an examiner's statement of reasons for allowance:

The prior art of records fails to disclose or render an obviousness of a Hadamard transformation method and device for processing image data comprising: a first rounding step of rounding up the least significant bit of each of the odd number of four coefficients transformed by each of said four four-point Hadamard transformation units and discarding the least significant bit of each of the remaining odd number of the four coefficients, so as to produce the integer type of four sets of coefficients, each set including four coefficients; a second transformation step of selecting one coefficient from each one set of the four sets such that odd numbers of coefficients among the four selected coefficients for one set were rounded up in said first rounding step, and supplying the four selected coefficients to a four-point Hadamard transformation unit and transforming the four selected coefficients using a four-point Hadamard transformation matrix; and a second rounding step of rounding up the coefficients transformed in said second transformation step so as to cancel propagation errors to be superposed over the transformed coefficients along with other limitations cited in independent claims 1 and 3.

The prior art of records also fails to disclose or render an obviousness of a Hadamard transformation method and device for processing image data comprising: a first and second transform units adapted to perform a Hadamard transformation on input data in a unit of four items of the input data, and to output first and second transformed coefficients; a first and second decoders adapted to generate first data to be added for rounding process based on a row number or a column number of the 4X4 block data; a first and second adder adapted to add the first and second transformed coefficients to the first and second added data from said first and second decoder respectively; a first and second discarding unit adapted to discard the least significant bit of an output of said first and second adder respectively along with other limitations cited in independent claims 4 and 8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on 7:00AM to 5:00PM M-Th.

Art Unit: 2193

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C Do  
Examiner  
Art Unit 2193

June 18, 2007

A handwritten signature in black ink, appearing to be 'Chat C Do', written in a cursive style.